

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/047363 A1

(51) International Patent Classification⁷: **C08G 61/12**,
C07F 7/18, 7/08

(21) International Application Number:
PCT/GB2004/004754

(22) International Filing Date:
10 November 2004 (10.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0326138.5 10 November 2003 (10.11.2003) GB
0413205.6 14 June 2004 (14.06.2004) GB

(71) Applicants (for all designated States except US):
CAMBRIDGE DISPLAY TECHNOLOGY LIMITED [GB/GB]; Building 2020, Cambourne Business Park, Cambridgeshire CB3 6DW (GB). **CAMBRIDGE UNIVERSITY TECHNICAL SERVICE LIMITED** [GB/GB]; The Old Schools, Trinity Lane, Cambridge CB2 1TN (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **TOWNS, Carl**

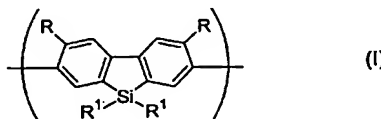
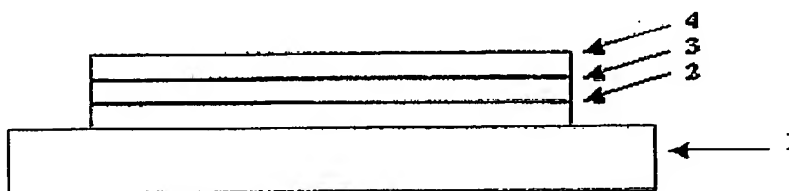
[GB/GB]; Cambridge Display Technology Limited, Building 2020, Cambourne Business Park, Cambridgeshire CB3 6DW (GB). **MAK, Chris** [GB/DE]; Melville Laboratory for Polymer Synthesis, (Department of Chemistry), Lensfield Road, Cambridge CB2 1EW (GB). **CHAN, Khai, Leok** [SG/GB]; Peterhouse, Trumpington Street, Cambridge CB2 1RD (GB). **HOLMES, Andrew, Bruce** [AU/GB]; Melville Laboratory for Polymer Synthesis, (Department of Chemistry), Lensfield Road, Cambridge CB2 1EW (GB).

(74) Agent: **ANWAR, Gilani**; Cambridge Display Technology Limited, Building 2020, Cambourne Business Park, Cambridgeshire CB3 6DW (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: **DIBENZOSILOL POLYMERS, THEIR PREPARATION AND USES**



(I)

(57) Abstract: A polymer comprising an optionally substituted repeat unit of formula: (I) wherein each R is the same or different and represents H or an electron withdrawing group; and each R¹ is the same or different and represents a substituent.



(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— with international search report